Role of Menstrual Symptoms, Rumination, and Self-Compassion in Premenstrual Depressive Symptoms

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Abstract

The current research aimed to examine the role of menstrual symptoms, rumination, and self-compassion, in the development of premenstrual depressive symptoms. Furthermore, the study also aimed to explore the role of demographic variables along study variables. For this purpose, a convenient sample of 250 university females from different universities of Rawalpindi and Islamabad was approached. Menstrual Symptom Questionnaire (Chesney & Tasto, 1975), Rumination Response Scale (Nohlen-Hoeksema, 1991), Self-Compassion Scale (Neff, 2003), and Center for Epidemiologic Studies Depression Scale (Radloff, 1977) were used for data collection. The Cronbach's alpha coefficients were found to be in the satisfactory range for all measures. Research findings shown that there was significant relationship between the study variables. Regression analyses showed menstrual symptoms, and rumination are positive predictors of premenstrual depressive symptoms. Self-compassion is the negative predictor of premenstrual depressive symptoms. Different demographic variables were explored, including education, age and early menarche. The implications of the current study have a variety as it will contribute in the previous literature, present a study in Pakistani context. It will also help to develop special training programs to make adolescents and adult females aware of menstruation, menstrual difficulties and coping strategies. Moreover, in clinical settings counselling can be provided to females to reduce menstrual symptoms, ruminative tendency and depressive symptoms and to help increase self-compassion. Cross-sectional design and self-report measures are the limitations of this study.

INTRODUCTION

Chapter 1

Introduction

Past studies has comprehensively confirmed the elevated levels of depression among adolescent girls and adult women as compared to the adult men and adolescent boys (Lewinsohn et al., 1993). Earlier studies has proposed that these difference were first appeared between 13 to 15 years of age, and it seems obvious to take into account both its diagnoses (Hankin et al., 1998), and depressive symptoms (Ge et al., 2001). Moreover, inflation in depression among adolescent girls was primarily referable to this gender difference which is then continues to be suffered throughout adulthood (Angold, 1992). Regardless of the concentration on variables such as body image dissatisfaction (cited as Brooks-Gunn, 1988), cognitive bias (Hankin, 2011), reproductive steroids (Halbreich, 2001), sexual abuse, and reproductive steroids, and the presence of wide range of theories, obvious comprehension of the etiology and developmental course of this rise in depression among adolescent girls has not been approached.

According to Steiner et al. (2003), strong verification for encouragement of the theoretical position about the role of reproductive steroids in emotional fluctuations observed among adolescent girls has not been provided by early researches. Reproductive life-cycle experiences including the menstrual cycle, menopause and the postpartum has been found associated with the importance of reproductive steroids in emotional fluctuations. Furthermore, individual emotional reactions to these reproductive-life-cycle experiences are related with each other. For example, those women are more vulnerable for menopausal depression and post-partum depression that experience PMS and those women are also more vulnerable to the menopausal depression who encounters post-partum depression (Stewart & Boydell, 1993).

Theoretical basis for present research are suggested by the confirmed relationship between different reproductive life-cycle experiences and emotional reactions. Fluctuations in girl's depressive symptoms during early adulthood and adolescence are correlated with negative emotions across different phases of the menstrual cycle, are particularly, assessed in the current study. Because the proposed

link between menstrual cycles related negative emotions and thoughts and early fluctuations in depressive symptoms are dependent on supposed consequences of reproductive steroids, in introduction concise discussion to related literature regarding the relationship between emotional symptoms and reproductive steroids and the importance of individual differences in this relationship. Fluctuations in reproductive steroids like estrogen and progesterone during the adolescent are significant with a clear and well-proposed regarding difference in levels and changes between females and males. During adolescence, women experience great cycle related fluctuations in these steroids, with the coexistence of the menstrual cycle. As these steroids have been associated with depressive symptoms (Rubinow & Schmidt, 2006), as well as to the specific modulator effects on neurotransmitter that are found linked with the depression, such as serotonin (Epperson et al., 2005) and GABA (Dubrovsky, 2005), for better comprehension of rise in depression among girls such steroids would be seen to emerge as the good idea to work.

There is little evidence explored within psychology to conclude that female reproductive steroids are responsible for rise in depressive symptoms among girls (Hankin & Abramson, 2001). It was suggested from the verified findings that exhibition of levels in reproductive steroids among girls are weakly related either with the depressive symptoms (cited as Brooks-Gunn & Warren, 1989) are related not at all with these symptoms (Susman et al., 1991). However, Angold et al. (1999) reported findings from study consisting of a sample of 465 girls ranges between 9 to 15 years indicated the strong consequences of progesterone and estrogen on depression. So therefore, null effects findings are away from being assured.

Emotional changes were accounted to individual differences in sensitivity to reproductive steroids relatively than their serum levels that were related to them, these were the findings from the more important than the mixed results across these studies is recent work (Rubinow & Schmidt, 2006). The individual differences become visible in sensitivity to fluctuate as functioning of both response power, and the capacity of response power, in clinic treatment for Premenstrual Dysphoric Disorder and Premenstrual Syndrome (PMS and PMDD) are emphasized by research studies showing individual responses to interventions based on use of hormone. For example, the medical suppression of ovarian activity shows in symptom comfort for about 50%

of premenstrual syndrome and premenstrual dysphoric disorders patients, but a no response or an excess of symptoms for the 50% of other patients. Moreover, those who have shown improvement for the ovarian suppression exhibited a getting back of symptoms when progesterone or either estrogen was medically reinstated, during ovarian suppression/hormonal replacement women who were not suffering from premenstrual syndrome shown no changes in their conditions (Schmidt et al., 1998). Studies conducted to assess medical treatment with premenstrual syndrome and premenstrual dysphonic disorder patients were may seem related to the current study, the outcomes of this research study are important because they have shown that some women have reacted positively, others have reacted negatively, and some did not show any change, to the same alterations in hormones.

Importance of studying individual differences in psychological base changes that are found simultaneous with the menstrual-cycle has been demonstrated by research studies. Physical and psychological characteristics of the menstrual cycle were related (Kiesner, 2009). Some women have shown negative psychological changes e.g., negative mood, others females has shown positive psychological changes e.g., positive mood, and others shown no change in their moods, in relationship to the same physical characteristics of the menstrual cycle (Kiesner, 2011). Moreover, it was shown recently that sample consisting of 213 female (students of universities) indicated 61% rise in premenstrual and fall during the cycle in depressive and anxiety symptoms and almost about sample of 13% indicated the similar opposite fashion, with an increase in during the mid of a cycle and decrease in premenstrual symptoms, and the other 26% of sample has not shown any manifestations of variation of cyclical process (Kiesner, 2011).

The importance of individual differences may help to guide in explaining why some earlier researches have not shown important consequences for menstrual cycle period on the anxiety symptoms and depressive symptoms (Harrington & Golub, 1981). Past reviews of the literature about the contribution of the reproductive steroids to the development of the depressive symptoms among adolescent girls within psychology have reached to the conclusion that there is a little support for the contribution these steroids to such symptoms. These findings are evident based on proof showing that levels of reproductive steroids among adolescent girls are not

either strongly related and have weak relationship with depressive symptoms or not at all linked with the symptoms of depression (Susman et al., 1987).

Given the limitations of present pharmacological treatments for the mood disorders related to the menstruation, there is a great requirement for the development of behavioral approaches which are empirical in nature means are based on evidences that will help in treating the specific behavioral and cognitive factors that seems to mediate the appearance of symptoms of menstrual related mood disorders. Some evidence based researches has proposed that cognitive and behavioral intervention (treatment) for mood disorder may seems to decrease the symptoms severity in menstrual related mood disorder.

Anyhow, because of the little availability of the basic research regarding particular cognitive and behavioral mechanisms related to the menstrual related mood disorders limits the growth or the development of the specifically effective interventions and treatments for these women. Hence, there is a great deal for additional work to distinctly defining the prime cognitive and behavioral mechanisms of stress and worsening in menstrual related mood disorders, so that a well-planned and fruitful behavioral-oriented treatment and better interventions can be planned or established. There was seen a repetition in coming back of the symptoms related to menstrual cycle and was found as a remarkable source of consistent coming back of distress among girls (Vichnin et al., 2006). For example, it was shown in earlier study that 56% and 40% girls respectively had reported at least one severe symptom. It has been shown that 31% females meet up for the diagnostic criteria for premenstrual syndrome (Vichnin et al., 2006).

However, across different ethnic and national group samples menstrual cycle-related symptoms have also been investigated. As in this example, which is a cross national sample of the Canada, U.S., and Slovakia, and 8.3% of symptoms were observed constantly with criteria for the PMDD, and 21.3% had reported symptoms that were constant with severe premenstrual syndrome (Steiner et al., 2011). Sample of A primarily girls of African America 84.3% has reported premenstrual syndrome, although diagnostic criteria were not applied stingily (Finally many studies also proposed that these symptoms are seen unexpected to sort out even during later adolescence.

The past study results were suggesting for the coming researches to focus on interventions of mood disorder related to the menstrual cycle and women's suffering from menstrual related mood disorders that must include or look for skills that can be better to understand such difficulties and to make healthy behavioral guideline in the face of powerful negative feelings, for example, dialectical behavior therapy, and interventions that also focus on rumination and emotion regulation, example include mindfulness based stress reduction. This proposed the possible usefulness of trainings involving skills for emotion regulations as example given was dialectical behavioral therapy, and this also suggest to focus on other possible behavioral interventions for a variety of maladaptive reactions to feelings such e.g., mindfulness skills trainings for the treatment of menstrual related mood disorders.

Finally, the earlier studies have also recommended that the menstrual cycle must be reviewed more fully or completely (which means including both physical and psychological symptoms) as a key predictor of the depressive symptoms within the general population of females. Certainly, unless a researcher is particularly targeting on premenstrual syndrome, research rarely or hardly take into account the menstrual cycle as a variable for study. With the Elimination of this main variable (menstrual cycle) study may guide the biased and erroneous results related to the causal mechanisms of depression among females with menstrual difficulties. Therefore, the menstrual cycle, and specifically both physical and psychological symptoms of this cycle, must be included in the study for assessing individual differences in women regarding depression (Kiesner, 2009).

Menstruation

Menstruation holds increased importance in the life of young girls, as experiencing menstruation is an important sign for reproductive health. In the women development menstruation is significant phase and is considered as of great importance. Periodic blood flow and cells take place about every 28 days from the uterus lining in a life of a female. Menarche (onset of menstruation) indicates the beginning of menstruation and indicates the body's readiness coming for child bearing. It continue to persist in the life of females till around age 50, unless interpreted by pregnancy or menopause.

Menstruation was defined as the " periodic blood discharge from the uterus lining which occurs more or less at regular monthly intervals during the active reproductive life of a female" (Critchley et al., 1986). Menstruation is often represented an event with social and cultural implications.

Menstrual Cycle

The process of ovulation and menses is accompanied by the menstrual cycle which is indicated by hormonal fluctuations in women human reproduction proposed both physical and psychological phenomena have been associated the phases of the cycle for changing the manifestation and severity of these phenomenas which change from woman to woman greatly. Few days preceding and during menstruation typically, experienced are negative reactions. Within the premenstrual sndrome literature large amount of inter-personal over-sensitivity is generally reported Serious impacts of examples of such sensitivities are expected upon relationships and other frequently reported symptoms of anxiety and depression (Mathews et al., 1995).

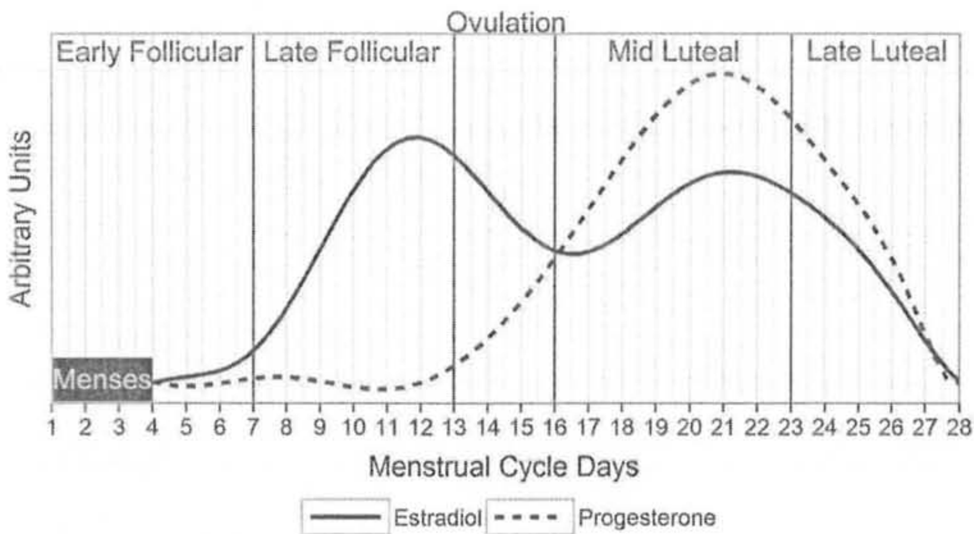

Figure 1. During the menstrual cycle and the corresponding menstrual phase theoretical pattern of estradiol and progesterone changes.

Mostly menstrual cycles throughout the early years have symptoms e.g., marked anxiety, depressed mood, marked effective liability, and decreased interest in activities have been regularly emerging throughout the final week of luteal phase of

cycle and remitted during the few days of the onset of menses. These symptoms must be intensifying enough to greatly interfere with school, work, or unusual activities and be absent entirely for at least one week post-menses.

Menstrual Symptoms

Menstrual symptoms emerge around the time of menses that are a wide collection of emotional and physical concerns. Monthly period with only few or no concern can be handled with ease and comfort by some women while other women as reported exhibit a large number of somatic and affective symptoms that may cause more trouble (Dorn et al., 2009). Premenstrual syndrome and dysmenorrhea are general categories of menstrual symptoms that belong to the diagnoses related to the menstrual difficulties. Based on the quality, severity, timing, and interpretation of the menstrual symptoms many women may exhibit menstrual symptoms that do not necessarily fit within the above mentioned general categories of diagnose.

Following menses pain associated symptoms are excessively associated with dysmenorrhea while affective and psychological concerns were generally related to the PMS. These menstrual related diagnoses have remarkable overlapping in the symptoms of both of these general categories given. Relatively normative emergence was signified by the increased prevalence of menstrual symptoms, the cause for concern may be the expected effect on other situation of female's lives. The most frequent symptom of dysmenorrhea is cramping, symptoms other than this symptom include also dizziness, nausea, headaches, vomiting, and backaches occurring during. A recurrent gynecological disorder in young women is dysmenorrhea with broad ranges of prevalence approximates, between 50 percent to percent. The exact prevalence was not known with such a largely fluctuating approximate and still the exact prevalence is not known. Normal experience of menstruation is strongly indicated by mild symptoms that may be relatively frequent whereas daily functioning is effected by severe symptoms. As in given example, 15 % of girls reported severe symptoms of dysmenorrhea, due to which daily activities participation in daily task activities is effected for 1 to 3 days every month.

Several aspects significant for development and health of young females can be ranged over by the outcomes of dysmenorrhea. As being recognized as the leading

cause among adolescents and young adults for work and school absences has been found more prevalent among adolescent girls The USA Researches have reported a rate of school absence 14-52 % due to dysmenorrhea among adolescents. In this age group under treatment or no treatment for menstrual difficulties may be especially noticeable for absences from school.

Adolescent population have distinctly prevalent dysmenorrhea, latest studies has shifted its concern towards PMS (premenstrual syndrome). Premenstrual syndrome was defined by the American College of Obstetrics and Gynecology as experiences of emotional and physical symptoms in the five days prior to the menstruation and after menstruation solving within four days. The symptoms included related to the emotions were low mood, depression, anger outbursts, anxiety irritability, social withdrawal, and confusion; the included somatic complaints were headache, breast tenderness, swelling of extremities, abdominal bloating, headache, and abdominal bloating (American College of Obstetricians and Gynecologists, 2000). Some degree of premenstrual syndrome (PMS) was experienced by up to 75 % of females during their reproductive life period. Physical symptoms included in this event are, such as appetite change, fatigue, and low energy, and the included emotional symptoms are, such as irritability, depressed mood, impulsiveness, anxiousness, and irritability. After the onset of menstruation generally, symptoms seems to disappear within the few days. A very severe form of PMS experiences were reported by around 10 % of females called PMDD (premenstrual dysphoric disorder), with the prevalence similar to that in the United States, Europe, Canada, Nigeria, Japan and India (Leichsenring., 2013).

Impact of Menstrual Symptoms on Adolescence

Women lives are may be significantly influenced by menstrual symptoms. During their reproductive fertility years health problems related to menses, such as menstrual, premenstrual syndrome, and heavy menstrual bleeding are experienced by several females. Importantly because of reduced work productivity menstrual symptoms can also be significantly leading cause to the economic burden. The % for dysmenorrhea symptom the menstrual pain, considered to be an important symptom, ranges from 25 percent across all females to as more than 90 percent among adolescents. During reproductive years period menstrual cycle irregularities are

usually experienced by females and occurrence of menstrual cycle irregularities are increased by the degree of severity and also the increased in menstrual symptoms According to American Academy of Pediatrics Committee on Adolescence (2006) the various somatic and psychological events and lifestyle related to health related may have various effects on the menstrual cycle irregularities and in the severity and occurrence of menstrual symptoms. Sleep has been receiving increased amount of attention recently, as a related factor in menstrual symptoms severity and irregularity in menstrual cycle period. According to Negriff and Dorn (2009) significantly higher physical complaints abdominal pain, tiredness, anxiousness, and short-term menses are significantly highly reported in adolescent women with evening type experiences.

Several physical, cognitive and psychological changes among adolescence occur and it is the age when several changes in hormones also occur and also the problematic age for reproductive health life so female adolescence takes menstruation as a problematic issue that leads to the requirement for counseling according to Sharma et al. (2008). Psychological health has been significantly associated with these changes that have been considered to have impact on their psychological health. Therefore, this age has been considered as of great of significance for getting purposeful information regarding the severity of menstrual symptoms and its consequences effecting on their physical health and mental health in previous researches have concerned adolescent female for the investigation of information related to the experiences associated with menstruation they considered the age ranges from 13 to 19 years and 14 to 20 years (Sharma et al., 2008).

Menstrual Difficulties

Bringing of long series of menstrual difficulties during menstruation was reported by some females and some females goes through this period without any serious problems, Great personality variations has been shown by various studies in this area during pre, peri, and post menstrual periods reported by Shipman (1968). Indicated in a study administered by Agarwala and sharma (2001) states that girls having 12 to 20 year of age, reported 20 percent irritation, and 18 percent headache at the periodic discharge.

Pre-menstrual syndrome (PMS). During the menstrual phase premenstrual syndrome (PMS) is experienced particularly when females report to experience a collection of psychological and physical symptoms that may resolved by the onset of or during menstruation. Anxiety, depression, rapid mood swings, lack of interest in daily activities, irritability, and poor concentration are psychological symptoms. Frequently occurring bodily complaints are fatigue and food cravings complaints while other frequently emerging bodily discomforts are breast tenderness, bloating, headache and abdominal pain. The PMS was defined as a complex of symptoms occurring within accurate structure and timeframe experienced due to individual differences in the experiences of symptoms, their intensity and the capacity of variation from cycle to cycle.

Diagnostic criteria for premenstrual dysphoric disorder (PMDD) was an old condition but with a new criteria in the Diagnostic and Statistical Manual of Mental Disorders. In the appendices of DSM-IV diagnostic criteria for the disorder are stated (Criterion sets and Axes were provided to further study) (American Psychiatric Association, 2000), and for the first time the criteria described below were included in DSM-5 (American Psychiatric Association, 2013). According to Daw (2002) normal physical phenomenon for this amount of medicalization of some women's has been argued by feminist authors.

The emergence of symptoms in the follicular phase of menstrual symptoms of the menstrual cycle has been identified in an initial diagnostic rubric of late luteal phase dysphoric disorder given in DSM-3-R, but rewritten temporarily to the current title in DSM-4.The biological cause for the premenstrual dysphoric disorder presently is most accepted but not clearly developed the relationship between hormonal changes of the menstrual cycle and the disturbances by neurotransmitters involved in the suspected depression. Emphasis for the treatment was on regularization of menses, improvement of symptoms and the resolving of dysfunctional social relationships.

Premenstrual syndrome has always been considered problematic while describing and defining the symptoms which are related to the disorder. Following list of cyclically repeating phenomenon of the premenstrual and menstrual phases was developed by Janowsky and his co-workers (1966): low mood, irritability, sleep disturbance, alcoholic excesses, nymphomania epilepsy, lethargy, vertigo, nausea

syncope, nausea, , unreal feelings, constipation, vomiting, bloating, enuresis, edema, urinary retention, increases fragility of capillary, colicky pain, migraine, glaucoma, migraine, relapses of meningioma, headache, and schizophrenic relapses and reactions and enhanced vulnerability to infection, suicide attempts, admission for the medical and surgical wards, work morbid it, crime rates, dermatological illnesses and manic reactions.

Premenstrual syndrome was characterized by over 150 symptoms recognized. These symptoms were classified into five different subcategories and categories: cognitive: indecision, decreased concentration, paranoia, suicidal ideation, rejection sensitive. Behavioral: decreased efficiency, decreased motivation, social isolation, poor impulse control. Affective: anger, sadness, irritability, anxiety, labile mood. Libido change CNS: vertigo, clumsiness, tremors, seizures, vertigo, tremors. Neuro-vegetative: anorexia, insomnia, lethargy, hypersomnia, anorexia, craving of certain foods, fatigue, and agitation. The reality of the premenstrual disorder has been debated densely in past years, as PMS was not identified as a disorder, rather as being either mental or in fact physical component of the menstrual cycle. Various symptoms such as sadness, lethargy, headaches, lack of interest in sex or heightened interest in sex has been associated with PMS (Baker & McNulty, 2010).

Prior and during the menstrual cycle period depression, anxiety, hostility, and emotional upset are increasingly evident. The list of symptoms that women experience is long over the listed are 200 items, ranging from the typical, breast tenderness, bloating, breast swelling, tension, irritability, etc., to adverse-affects such as epilepsy, depression, lack of coordination, spontaneous bruising, and many more. Females must smile broadly and tolerate PMS as many credited premenstrual syndrome to the mind of the females complaining it (Brock et al, 2016).

Approximation about the mild discomfort of female experiences related to premenstrual were reported 30 percent to 90 percent, and experiences related to no symptoms for PMS were reported only for 5 percent by females. Menstruation has major emotional and psychological distress even cross-culturally. Malfunctioning in the production of progesterone is considered responsibility for all these illnesses, which disturb the working of regular cycle of the menstruation (Brock, 2016). However, various external factors have been found influencing the mood such as

relationship with teachers, parents, and/or with the opposite sex, so it is not true to attribute women's hormones for all emotional changes.

Relationship between menses related health problems of women is suggested in a past such as premenstrual symptoms, menstrual pain, and irregularity in menstrual cycles, and psychosocial stresses. Proportion for premenstrual symptoms, menstrual pain, and the irregular experiences of menstrual cycles were reported respectively by the students as ranging from 63 percent to 79 percent proportion. Students who had indicated increased stress score described more premenstrual symptoms, menstrual pain, and the experiences related to irregular menstrual cycle than those who did not. Significant predictors for menstrual pain were having premenstrual symptoms and age at the onset of menarche. High stress score, menstrual bleeding and heavy menstrual flow were significant predictors for premenstrual symptoms. Significant predictors for irregular menstrual cycle experiences considered were both stress score and body mass index. Premenstrual symptoms and irregular menstrual cycle experiences were proposed independently related t that the psychosocial stress among college girls, implying that the changes in functional strength of women as a consequence of stress are related with changes in their menstrual functioning.

Majority of the females Thakre et al. (2012) found approximated as 71.8 percent in study conducted in India had reported one or the other problem linked with menstrual cycles. Such as 61 percent dysmenorrhea and 55.8 percent PMS and also other difficulties involved to menstruation were described as 55.3 percent of the study participants. Three or only 1 percent girls had reported menstrual period for less than two days whereas the bleeding of 7 percent or 27 subjects was reported to last for more than six days. Unusual bleeding was described in 35 or 9 percent of the participant's population. About 15 percent of participant had reported having irregular cycles and a very few had reported to miss their cycles.

Stress. Increase in prolonged menstrual cycle is related to the high levels of anxiety and upsetting work conditions and adaptation in menstrual. The risks for the length of short cycle were considered the stressful job circumstances which multiplies the risk for the length of short cycle. Regarding the influence of menstruation on school participant and their mobility, the usage of menstrual pads combined with the

menstrual cleanliness has shown in Ghana decreased in stress related to menstruation and also decreased girls absence from school.

Mood states during menstruation. According to Clark (2005) mood differ from emotions, feelings and affections in that they are less intensified, less specific, and are less likely to be stimulated by the specific events or stimulus. Mood is defined as an emotional state. Moods exhibit a more positive or a negative valence. In other words generally people speak about being in a good and bad mood. The process of starting, managing, and being consistent with the depth and reoccurrence of inner feelings was defined as mood states. Also included in the process were paying concentration, to get inspired and psychological behaviors related with feelings with the purpose to achieve personal goals (Sharma, 2007).

Emotions in ancient times were conceptualized as illogical, animistic, and instinctual and primitives having the ability of disturbing the higher order processing of reasoning and thoughts by Greek philosophers. Emotions have been taken by many as impulsive current with the ability to interfere and disrupt logical thoughts and behavior since these past conceptualizations. They emphasized on the Freudian theory on unconscious emotional processing giving shape to the personality and psychopathology and also by reinforcing the image of the disruptive effects of emotions.

When female cyclic mood changes are compared with the men's baseline, females shown lesser vigor scores for both premenstrual and menstrual, having great confusion during menstruation. Since men had not shown any variations, in this way it indicates that the consequences of menstrual-cycle were responsible (Sharma, 2007). Negative moods and physiologically distress causing symptoms among females and are not, of course, always attributable directly to menstrual cycle and child birth, for example, may be facilitating there life of spasmodic dysmenorrhea, however it can be the source of increase the intensity of negative symptoms of PMS.

It is the capability to react to the ongoing demands of events with the diversity of affects in a series that is socially acceptable and enough elastic permitting spontaneous reactions as well as it is the capability to hold up uncontrollable responses required while emotional regulation means the ability of an individual to

affect their emotional reactions. It alludes to the ability to transform and regulate one's passionate reactions to the attainment of objective regulated outcomes Mood states has been tuned into an important thought into social and personal psychology. Sympathy and pro-socially behaviors mood swings has been shown, for instance, to be correlated with the affection regulation and related with the ethical actions and common communal skills.

Past researches showing heightened negative mood present at time and the higher fatigue and lesser vigor scores for females reinforce menstruation. It is also possible that the female's negative mood and negative symptoms at menstruation were casually associated, with lower vigor and higher fatigue related with the pain due to a poor sleep and a commensurate challenges in getting done daily regular tasks successfully Some of the constructs which have been related with female's cycle and frequently occurring during menstruation are tension, fatigue, and/or irritability and some kind of pains like sexual desires, depression. Need for love and care, and anxiety and regardless of prevalence of symptoms related with the menstruation, the tendency to have menstrual and premenstrual challenges have been correlated with the neuroticism (Clark, 2005).

It is suggested that anxiety reactivity levels effects reports of menstrual distress and mood more than current menstrual cycle phase on both retrospective and prospective scales. Higher in anxiety responsive women described more intense menstrual symptoms, state and trait anxiety, and low mood than lower anxiety responsive females. An exploration of the menstrual symptoms subscale endorsed by the higher anxiety reactivity females disclosed a persistent pattern of more description of bodily sensations than emotional variations. Similarly, higher levels of anxiety reactivity females described more apprehension about pathology as well as more bodily preoccupation and fear than low anxiety reactivity.

Emotional states related to menses are explained by the variations in the incidents of certain behaviors. The following to tend to emerge more during and prior to the menstruation: suicide, major accidents, suicide. It is suggested that an illustration of premenstrual was based emotionally on the interaction between culture and biology. It is indicated that premenstrual changes in mood appear from the increased arousal of the central nervous system which leads to a heightened reactivity

to experiences and situations which may be responsible for increase in both negative and positive emotions. It is also suggested that women themselves feels a need to explain feelings that are judged as unusual or out-of-role for females. In the study, observer's attributions of the behavior of women were highly affected by the information that a women was in her premenstrual phase. Negative emotional reaction was attributable to the biology more often than positive reactions, regardless of accompanying external factors.

Dysmenorrhea. Many women's has reported to find their periods as an agonizing trail, even with greater tolerance for pain. Dysmenorrhea was described as a painful menstruation. Primary and secondary were the two main types of dysmenorrhea, described. The basic difference between the two types is their causation, primary dysmenorrhea is caused due to the over production of prostaglandins, a hormone that is responsible for the contraction of the uterus muscles. Symptoms included are abdominal cramping, nausea, diarrhea, vomiting, headache, fatigue, dizziness, and irritability. Secondary dysmenorrhea is caused by a various factors, for example due to the presence of intra urine tumors, difficulty in the cervical opening, or endometriosis, an event where uterine tissue grows on several parts of the abdominal cavity. Before and during menstruation, broad ranges for secondary dysmenorrhea were exhibited with a broad range of symptoms: constantly lower abdominal pain, pain in back and thighs and painful intercourse

Self-Compassion

The increase in rate of diverse kinds of psychological distresses has guides techniques to look for therapeutic techniques of large variety. Positive psychology movement claimed that focus of Western Psychology has primarily been on abnormality, pathology, and ill will to an extent that human beings seemed to be lacking in positive aspects like human strengths and well-being

The dialogue between psychology and eastern school of thought Buddhism has guided towards the emergence of diverse kinds of significant practices yielding positive outcomes. One of these fruitful techniques that have been emphasized by Buddhism is the acquiring of compassionate stance that is perfect for a helpful attitude towards others and so as to increase their ability to identify and motivate

themselves to bring about a purposeful change. Practicing so allows for happiness wellbeing and awareness among people by having control on their minds. Negotiating such a stance towards others and themselves put people in a better position to cope with challenging feelings through more thoughtfulness, self-governed care and support

In order to deal with diverse psychological health problems (primarily depression, anxiety, & anger) strengthening of self-efficacy, self-esteem, or self-regulation has historically been focused in West (Gilbert, 2005). Among the positive feelings, compassion specially has been avoided in Western psychology. Promotion of compassion from Buddhist psychology, which is a 2,500 years old variable in that area, has instrumented Western psychology with a potential tool to earn happiness. Compassionate emotions have the potential to keep a person happy even under unfavorable external conditions. According to Gilbert and his co-workers (2005) compassion not only require an underlying processes that activates the making up of pro-social relationships with others but also favors one with a strength to heal mind and body. The usual ways of decreasing threats and comforting the suffering gives only with short-term comfort as is the case in seeking love or appraisal from others, fame, sex, glory, and wealth. In addition their consequences can even be worse as they lead one to seek for more. There seems a fear of their loss and their pursuit can even destroy one's sense of self, create feelings of jealousy, and even problematic for others. Compassion moreover allows for great awareness and a condition of peaceful happiness through illusions experienced by training the mind. So growth of compassion for self and others is seen as a way to release suffering. Two useful strands comprehend compassion as it is being studied and these are the evolutionary and social psychological perspectives.

Evolutionary perspective. The comprehension of the evolutionary perspective has been given in terms of social mentality theory by Gilbert (2005) that summed up the concept by sketching upon principles of attachment theory, evolutionary biology and neurobiology. The theory states that people have built different types of social mentalities. Social mentalities are the configuration of range of mental abilities and modules (e.g., action tendencies, thinking patterns, and concentration regimes) that are stimulated by the tendencies to secure specific kinds

of social relationships. This unusual structuring of social mentalities have given rise to unique mental and physiological framework where some components (affection, putting in effort and hostility and dishonesty) are turned on and others are off. The basic idea is that people are triggered to trace "specie general, evolved biosocial goals and needs" that might include developing friendships, flourishing relations, and alliances, taking care of children, participating in competition, increasing group participation as brain patterns are structured in unusual ways as matter of enhancing experiences.

Gilbert (2005) has explained compassion as openness towards one's own and other's pain that is practiced without any doubt and non-critical manner. It also involves the prolonging to get rid of agony and thoughts deemed related to the etiology of stress and behaviors. In short, it underscores a combination of needs, feelings, cognitions, and behaviors from which compassion has grown out. Social mentality theory contends that self-compassion has served to switch off the threatened system and turn on the self-comfort system. Threatened system was related to emotions of uncertainty, defensiveness, and limbic system, whereas self-comfort is related to the sense of secure attachment, protection, and oxytocin-opiate system (Gilbert, 2005). Therefore, practicing compassion with self is considered as a path to blossom one's secure attachment, protection and care giving stance that has gained evolutionary importance by human physiology.

Self-compassion in perspective of social psychology. Self-compassion is a newly emerging trend in the field of personality psychology. It is describe as, compassion bowed inward in the case besides when distress means are external, sorrow and unbearable situations or personals disappointments, actions, and inadequacies. In a contrastable style, Neff has favored it to understand non-judgmental standpoints to one's letdown and uncertain happenings. One's expression of uneasiness for one's own pain without pushing them out of consciousness and having a robust yearning to lighten the knowledgeable pain by dealing with oneself kindly is a real self-compassion. Self-compassion comprising of attachment, sincerity, and preventing ones from one's sorrows (Ellis, 1973).

Self-Compassion Aspects

Self-compassion has mixed three components including Self-judgement versus self-kindness, isolation versus common humanity and over-identification versus mindfulness.

Self-kindness. When we undertake cheating or feels uninterested relatively self- compassion indicates being genuine and encouraging towards ourselves than hitting ourselves with self-devaluation. It recognizes that being flawed and experiencing life challenges are certain, so we can only ease and foster comfort for ourselves when we face the complications with logics than being annoying when life falls short to our ideals.

Common humanity. Unkind self-perception comprised one of the greatest problems, which tends to make individual feels lonely. When concentration is paid on something about us we don't like. We illogically feel like that everyone else is perfect and it is only me who is having lack the required qualities. Even with reasoning processing, it is a kind of destroyed self-centeredness, which focused on our absences and gives us dysfunctional vision so that we are not able to see anything else but our own lacking, and hateful self.

Mindfulness. Mindfulness is an unbiased, responsive state of mind in which cognitions /emotions they are observes as they are, without burying or denying them. We can't avoid our suffering and feels compassionate for it at the same time. Of course, we may think that pain is blindingly clear.

Other Psychological Approaches and Self-Compassion

As notion of self-compassion while established on eastern origin, is persistent with the western psychologists work in a discipline of diversity. Due to limits, it is unexpected to deliver an adequate impression of self-compassion in which it conveys to other theory and research. Moreover, certainly important areas will be focused.

Judith Jordan work has shown closed proximity with the variable self-compassion. She was the founder of model self in relation of psychological women's development writings shortly described the self-empathy, as a process of accepting

oneself without being judgmental and creative towards one's sufferings or self. Thus in this interpretation, Jordan (1989) empathy for self is in close relationship to being empathetic for others so that one focusing with the predictable loss and failure related with human being that could help to live successful life.

Humanistic psychology. Self-compassion basic idea resounds to the work of various psychologists of humanistic approach (Ellis, 1973). It explained that human growth is significantly dependent upon helping others, accepting, and identifying personal failures and suffering as well as the pains of others. He argued that lack of awareness about one's emotions, motives, recollections, mental-concepts, and strengths leads towards the development of psychological diseases. Generally, fear of knowing oneself is defensive in order to provide protection to our self-esteem. Self-awareness is better maintained by having compassion for own grieves and failures. Maslow named it as a b-perception, with stands a non-judgmental, forgiving, emotional approval towards oneself.

Self-compassion therefore, is similar to that Roger and his co-workers (1961) named positive unconditional judgments or assessment of the self, rather the sense that assumed an unconditional emotional and caring attitude towards one's self. Ellis (1973) suggested that self-compassion foster social relatedness by supporting reasonably than undermining spirit of accountability to others. It gives unconditional self-regard that worth for self is not valued and assessed.

Emotional regulation and self-compassion. The construct of self-compassion has been found correlated to latest work in field of the development of emotions, specially, affection guidance and coping. It is the process through which people give concentration to the feelings, management of their severity and length of affectionate stimulation, and transformed the meaning and nature of state of emotion when experienced with distressing or stressful events (Thompson, 1994). Traditionally, emotional responses to problems such as depression is seen as dense mechanism used for avoiding and to detract individual focus from that issues directly facing them rather than studies have found that people making attempts effortful for maintaining consciousness of investigating and understanding their feelings have much more positive psychological adaptation in after. Compassion for self provides

mindfulness of individual feelings so that painful emotions sort out to be reached with understanding, a sense of shared humanity and kindness rather than denying.

Self-compassion and psychological perspective. Self-compassion is newly introduced construct in research so it is a better reason to believe that being compassionate leads towards the positive mental well-being. Compassionate people, even in unfavorable circumstances proved increased mental health then people lacking in self-compassion. All people neither experience sense of failure or pain in an amplified way communicated by unkind self-criticism (Blatt et al., 1982), over-identifying thinking patterns and (wood et al., 1990), feeling isolation (Nohlen-Hoeksema & Morrow, 1991). This encouraging attitude towards one's self must be related with various fruitful results of mental disorders, such as lessen anxiety, lessen depression, enhanced life satisfaction, and lessen neurotic perfectionism. Discussion of self-compassion has focused in conditions of suffering or disappointment in a less unpleasant circumstance even in depressive states. Self-compassionate people trying for preventing themselves first place from pain experience. Self- compassion thus encourages adaptive life style and psychological well-being in depressed people.

Rumination

The Prediction of origin, severity, and in some studies the length of depression has been prospectively related to rumination. A persistent and recurring thinking pattern, involuntary entering consciousness and concentrating on one's depressive symptoms is defined as rumination that also concentrate on one's attention to the inferences of these symptoms(Nolen-Hoeksema, 2000).

Later, thinking repetitively about anything not necessarily involving depressive content was also defined rumination .The susceptibility of facing depression and increase in current depressive symptoms increases by rumination in response to negative life situations. One adaptive and the other one maladaptive are two constructs of rumination (Watkins, 2004).

Reflective rumination. Self- reflective reaction to accepting and resolving difficulties, also associated with simultaneous depression, but was not shown to predict depression prospectively stated as a more solid was reflection or reflective

pondering, (Cox et al., 2012). Therefore, healthy strategy might be more indicated by reflective pondering. How the two components are associated to suffering in somatic conditions However, is not clear. Reflective rumination entails positive pondering towards oneself, fascinating emotions about ourselves and provocation

Brooding rumination. The differentiation between reflective and brooding rumination has been given by brooding has been defined as the more unhealthy aspect of rumination, or defined as feeling dwell passively for negative sentiments. Brooding has been correlated simultaneously with and following up depression scores. It entails negative depressive emotion about oneself. It also leads to the development of depressive symptoms. According to Raes (2010) it was stated that brooding rumination is viewed as a significant factor of risk for experiencing depression has used RRS, scale, and suggested sub components of a rumination in a cognitive therapy research, such as the brooding and reflection. In one research it was found that brooding rumination predict depression more and reflective rumination.

Regardless of well-studied construct, definition of rumination still absence of consensus among researchers, and different research approaches it differently. Nohlen- Hoeksema and Morrow (1991) conceptualized rumination as the leading stream regarding researches on rumination and according to that conceptualization rumination is a mental and behavioral state of concerns demonstrated by the people in the face of stress, when he get absorb passively by concentrating keenly on the potential sources, signs and accompanying costs of the indicators generating distress. Stating through other end rumination brings spell of repetitive, cover self-focused judgements observing especially one's undergoing experiences of depressive symptoms, low mood, and manifestation of those experiences. This conception brings progression in our knowledge about interweaving the concept of depression.

Intellectualized brooding rumination is a ruminative tendency on negative interpretations succeeding stressful life events. Unlike, Nohlen conceptions of rumination, which explain self-focused beliefs, brooding occur before the onset of low mood. Depression causation has implicated heavily by the components of rumination (Robinson & Alloy, 2003).

Response Style Theory

Colleagues and Nohlen-Hoeksema have been influential in advancement of knowledge of thinking of rumination in depression. The response style depression theory (Nohlen-Hoeksema & Morrow, 1991) conceptualized rumination as a passive and repetitive thinking about depressive symptoms, outcomes of depressive symptoms, and possible etiology. Rumination involves to persistently focusing on individual signs of depression and its meaning, origins and significances of depression (Nohlen- Hoeksema, 1991). RST indicates that brooding rumination comprised of repetitive self-focused thinking related with unhealthy coping, while reflective rumination may be healthy coping. As suggested by the researches people respond to their mood at the time of distress in many ways. Escaping or disowning may be selected, an accomplishment designed at shifting the milieu might be taken, social support might be seeking out or rumination can be an added choice (Nohlen-Hoeksema, 2000).

The RST has recommended two different types of coping styles, namely rumination and distraction addressing intellectual and interactive responses to the depressive symptoms. Present study deals only with the depressive rumination style of coping, explanation have fixated on that. RST by Nohlen-Hoeksema (1991) proposed rumination as a repetitive thinking pattern and concentrating on negative emotional state, disturbed thinking about a distressing event, distress linked to the thought of recent events. Campbell and Trapnell (1991) on the basis of the motivation and five factor model of personality distinguished between the rumination and reflection subtype of private self-consciousness. Reflective pondering is a reflective rumination motivated by epistemic interest in self and related to the open-ness to experiences. It characterized as a form of self-centered aimed at understanding the self and defeating problems and difficulties. Brooding rumination refers to as an anxious form of self-concentration, such as unhappy, restless, and depressed thinking pattern.

Rumination and Psychological Functioning

Researches indicates that brooding rumination has been positively correlated with the personal distress and the unhappiness of memories, however reflecting rumination has been positively associated with perspective taking and empathic

concern. Neff (2003) provided the first evidence that suggest higher self-compassion leads to lower rumination. Individuals high in self-compassion may experience negative feelings less following a negative event of life because they ruminate less or not about possible negative outcomes of such an event.

Rumination, depression, and negative thinking. Response style theory proposed that cognitive vulnerability theory have explained the commencement (Nohlen-Hoeksema & Morrow, 1991) preservation (Nohlen-Hoeksema, Larson, & Grayson, 1991) and exacerbation (Alloy & Just, 1997) of depression period. The rumination tendency is stable relatively even if the observable changes are in the level of depression (Bagby, Mcbride, & Rector, 2004). The link between brooding rumination and depression seemed irreplaceable even on controlling the negative cognitive styles and thinking patterns, i.e. pessimism, perfectionism,. Rumination served to enhance the negative thinking pattern in perspective of past, present and future among dysphoric people. Nohlen-Hoeksema, 1998). Similarly, they are susceptible to lack opportunities to be happier, having positive events or fun activity in the upcoming future (Lyuboirsky et al., 1999).

Individual practicing brooding rumination has low self-confidence, are more self-critical, negative, and tend to blame himself more for the unpleasant circumstances or any unusual event he has to face (Nohlen-Hoeksema, 2003).

Rumination and problem solving. Individuals engaged in rumination delivers clarification of their repetitive actions, being inwardly directing to resolve the problem (Papageorgiou & Wells, 2002). Rumination in actually makes them unable to do so, for example people in their low mood fails to resolve their diffulties effectively as they sees their issues as unsolvable and overwhelming (Nohlen-Hoeksema, 2003). Even though solution has been generated but their implication appears non-probable, in stressful events, people having ruminative inclinations are less susceptible to involve in healthy problem solving (Lyubomirsky et al., 1998). They tend to absorb in more unhealthy and even harmful response to interpersonal and has shown contentment and obligation to their explanations and strategies in a condense way.

Rumination and instrumental behavior. Rumination resist problem solving it sucks people motivation and capability. Following the similar fashion,

rumination encourages withdrawal to engage in constructive behavior and absence of effectiveness (Papageorgiou & Well, 2004). Various studies have also explored that in context of negative emotions and excessive concentration on negative feelings individual experience absence of motivation in initiating adaptive behavior. Comparison among ruminators and non-ruminators proposed that ruminators do not involve themselves in distracting activities or trying to identify the reason of their stress to lift their mood (Lyubomirsky & Nohlen-Hoeksema, 1993). Negative correlation between depression and creativity might be seen in response to the rumination. Women experience heightened distress and ruminate chronically (Lyubomirsky et al., 2006).

Rumination and social support. Chronic ruminators usually have dependent, clingy interpersonal style, and they aggressively behave in a way that produces hindrance in a relationship with family, friends, and even strangers. They face less emotional support however; they wish to seek more support that is social after their loss (Nohlen-Hoeksema, 2003). The result of various studies has suggested that the rumination has perceived less favorably by people. In short, due to rumination people becomes keenly conscious about their problem in lives, which leads them simultaneously and unable to generate effective solutions and becoming helpless about being able to change their circumstances. Thus, rumination makes individuals susceptible to absorb in uncontrollable and unwise struggles to do something and put up uniformly in passivity and state of worthless. Rumination serves as an engine that keeps depression running chronically (Nohlen- Hoeksema, 2003).

Depression

Depression is a low state mood that induces revulsion to activity and have negatively impact on a person's point of view, comprehension, task performances, and physical well-being People suffering from depression feel useless, vacant, guilty, hurt, worried, hopeless, sad, or tense. Depressive individuals feel lack of interest in pleasurable activities, loss of appetite, or overeating, problems in concentrating, forgetting details, difficulty in making decisions, and even suicidal attempts are common experiences of these individuals. Inability to stay awake, a feeling of being extremely tired, impatience, sleeplessness, and digestive system problems may

become resistance to treatment. Seligman (1973) defines depression as mental health acute rhinitis, because it is predictable who might develop depression or not.

Short-term low mood is not always necessarily a psychiatric disorder. It could be due to many reasons may be in response to some other medical conditions or side effects of any medical treatment, or could be a normal reaction to certain life events. Depressed or low mood can also be considered as associated feature of certain psychiatric syndrome such as clinical depression. Major life transitions such menstrual difficulties, menopause, financial problems, job stress, relationship conflicts and bereavement can leads to develop depression.

Humanistic theory of depression. Humanistic theory states that human species has definite unique needs. Self- actualization is ranked higher in these needs). The self-actualized human has a meaningful life. Depression occurs due to obstacles or hindrances in the motivation to fulfill that need. Parents rather of accepting their child and providing them unconditional love leaved conditions of love and worth. Failure to live up to parental obligatory standards makes vulnerable for negative self-concept and depression in the individuals. They seek for avoidance by contradicting their true image and pose an image of ideal person they wants to be. This misrepresentation is in response to please others. This pretention split of their true self and generate hatred of self. Individuals start deriving himself of being living a fake life and develop depression. Negative life events leads to depression.

Depression, Rumination, and Self-Compassion

Nohlen-Hoeksema et al. (2008) studies have shown that distraction to the unpleasant situation might be the helpful temporarily. Nevertheless, long-term distraction prolonged distress has evidenced by various studies differentiated rumination constructs in to two different factors. Their study result has supported the two model of rumination comprised of reflective rumination and brooding rumination. Potential factor for predicting depression was found as brooding rumination. Study and same two-factor structure of rumination has been identified and also that brooding rumination is more strongly linked to depression than reflective rumination. This result has provided accumulating proofs that rumination plays a key role in depression. People tend to absorb in rumination to comprehend their problem while in

fact, rumination has a range of negative outcomes and powerful potential in maintaining depression.

Lyubomirsky et al. (2004) has shown that instrumental behavior and effective problem solving is reluctant by rumination. Distracting from one's negative feelings and way of thinking might help to relieve distress (Nohlen-Hoeksema, 1991). Empirical evidence indicated that likelihood for developing depression is increased in response to negative life circumstances (Alloy & Just, 1997). The duration and severity of a current depressive episode is associated positively to the ruminating predisposition (Nohlen-Hoeksema, 1994). Neff (2004) suggested that self-compassion help depressive people to defeat their distress and encourage reflective review among them. In difficult conditions of the life, compassionate people treat themselves kindly and humbly. Instead of personalization of their problems, they tend to sustain a more objective perspective of the event (Neff, 2004). Self-compassion accounts primarily in understanding the well-being of depressive individuals based on differences in how people respond differently to age related alteration in health, mental capacity, and life statuses they review how compassionate they treat themselves when difficulty arises. Self-compassion could be taught to self-critical people. Self-compassion has been shown as highly with the mental health and adjustment, including less depression, less anxiety, and more life satisfaction by various studies (Neff, 2013).

Rationale of the Study

Menstruation is a universally experienced biological phenomenon which is of great importance in life of the females. There is little research on the said phenomenon in developing countries like Pakistan and those available are mostly done in medical sciences. Mainstream of the original research work in Pakistan has primarily focused on attitudes, experiences and myths related to the menstruation and premenstrual syndrome etc. Still a very few studies have found positive attitude towards menstruation, although menstruation is of high value and of great significance for womanhood.

Overall mainstream research has neglected the menstrual symptoms and menstrual cycle as a variable of study which can help in understanding these attitudes towards menstruation, to promote females reproductive, physical and psychological

health and also help in understanding and developing effective strategies to deal with both physical and psychological symptoms of the menstrual cycle. The spirit behind this exploration is to fill in a previous research gap as the deterioration of both the physical and mental health is subjected to the severity of menstrual symptoms and depressive symptoms.

Therefore, the present research aim to approach the association between menstrual symptoms, rumination, self-compassion, and depressive symptoms among females to promote the better reproductive health of Pakistani females and also to help change their attitudes towards menstruation by kind. There is a lack of literature in perspective of researches conducted on menstrual cycle or menstrual symptoms. There are very few occasions where the primary research aim was the menstrual. So this particular domain especially required a great need to explore. The present research pertains to investigate the role of rumination in association between menstrual symptoms and depressive symptoms.

To examine the influence of menstrual symptoms, rumination and self-compassion on depressive symptoms, prospectively assessed menstrual cycle related physical and psychological symptoms. At the age of twelve or thirteen many young girls today look mature but still they think in a ways that are essentially childlike. Society would be morally obligated to meet the emotional needs of these girls given this is the case. The conflict experienced by girls aggravate merely by the failure to do so who's emotional, physical and cognitive maturity levels are not coordinated with one another. The risk increased for developing because of this among adolescent girls are depression, eating disorders, low self-esteem, and other a number of negative attitudinal and behavioral problems.

Based on the standpoint posed by positive psychology there is a shift in focus of psychology away from the absences of disease and illness. Rumination is an important precursors of depression however many people reports a mild level of rumination and they do not develop a diagnosable depression. This permits to explore it with reference to the menstrual symptoms as suggested in previous research "difficulties in emotional regulation and higher trait or tendencies towards rumination (as index of brooding rumination was used to measure) were expected to further intensify the intensity of menstrual related mood disorders and premenstrual

emotional symptoms in females (Schmidt et al., 1998), and depression. Study aimed that either its absence or presence accounts for level of depression, menstrual symptoms or not. Self-compassion is considered as to serves to minimize the damaging effect of rumination and adds imperative feature of the study.

A new construct in the field of positive psychology is self-compassion so it is reasonable to explore this particular construct with the menstrual symptoms, rumination and depressive symptoms. Lack of social support, decline in self-esteem, negative attitude towards menstruation and physical and psychological menstrual difficulties makes females vulnerable for multiple psychological disturbances such as brooding upon past experiences that might leads to the risk for the development of depression or other chronic illnesses. The present research seek to investigate how brooding rumination increase the level of depressive symptom among menstruating females. Self-compassion can buffer individuals from various psychological disorders such as depression and suffering.

The present study will investigate how self-compassion help in reducing depressive symptoms and brooding among females with increased menstrual difficulties and depressive symptoms. The way females attribute to their menstrual related experiences also increase or decrease their levels of depressive symptoms. Highly compassionate individuals are reported to less ruminate and experience no or lower depressive symptoms. In this way we will see how we can help females with menstrual difficulties to overcome these difficulties by practicing this positive construct.

The role of various demographic variables for example age, education, age of menarche and socio-economic status were aim to study along with the main study variables to see the differences of these demographics on study variables. It would help in identifying particularly targeted population for the intervention and treatment purposes for menstrual related difficulties.

METHOD

Chapter 2

Method

In the following section objectives and assumptions of the present study are discussed. After these, operational definitions of the variables, sample and measure of constructs and procedure of the study are discussed in detail.

Objectives

1. To see the relationship between menstrual symptoms, rumination, self-compassion and depressive symptoms.
2. To see the relationship between physical and psychological symptoms of the menstrual cycle.
3. To explore the role of various demographics (age, education, and age of menarche) in relationship to the variable of the study.

Hypotheses

1. Menstrual Symptoms are positively associated with rumination and depressive symptoms and negatively associated with self-compassion.
2. Menstrual symptoms, rumination and self-compassion are predictors of depressive symptoms.
3. There is positive association between physical and psychological symptoms of the menstrual cycle.
4. Females with higher education, age and with early menarche will be higher in score high as compared to females with lower education, age and later menarche.

Operational Definitions of Variables

Menstrual symptoms. Around the time of menses a wide collection of physical and emotional concerns that emerge that is called menstrual symptoms. Monthly periods are easily managed by some women with no or few concerns while a number of somatic and/or psychological symptoms are experienced by other women experience that may be more problematic (Dorn, Hillman, Huang Negriff, 2009).

Menstrual symptoms are operationally defined as scores on Menstrual Symptom Questionnaire (Chesney & Tasto, 1975). High scores on the scale will predict higher menstrual symptoms and lower score will predict lower menstrual symptoms.

Self-compassion. Self-compassion is defined as a compassionate warm and kind stance of an individual towards yours own distress non-judgmental and understanding approach towards your insufficiencies and letdowns, and understand them a part of human common experiences (Neff, 2003).

Self-compassion is operationally defined through scores on self-compassion scale (Neff, 2003). Scores are computed on the subscales of dimensions, common humanity, self-kindness mindfulness, over-identification self-judgment, and isolation. High scores on the scale predict higher self-compassion and lower scores predict lower self-compassion.

Rumination. Rumination is operationally defined in depression literature as self-centered and submissive pattern of thinking focuses on individual's negative emotions and symptoms leading development of depression. It entails two constructs.

Reflective rumination. Reflective-rumination is a meaningful revolving inward in involvement of cognitive problems solving to diminish one's depressive symptoms and in analyzing one's personality to understand reason of being depressed (Treynor et al., 2003).

Brooding rumination. Brooding-rumination posits negative and repetitive thoughts about oneself in circumstances with some unreachable goals and thinking about recent situation to had gone better (Treynor et al., 2003).

Reflective Rumination and Brooding Rumination are operationally defined through scores obtain on Rumination Response Scale (Nohlen-Hoeksema et al., 2003). A composite score obtain by adding the responses on the 10 items of RRS measuring brooding and reflective rumination. High scores on each scale indicates higher rumination, while low score indicates lower level of rumination.

Depression. Depression is defined as feelings of displeasure, distress, inadequacies, passive thinking, and feelings of complexity. Depression is in response to negative self-schemas and unrealistic thoughts about self, environment and the future. Depressive individuals tend to blame themselves for every happening (Beck et al., 1961).

Depression is operationally defined through score on the CES-D (Radloff, 1977). Higher scores on CES-D indicates higher levels of depression, while lower score indicates lesser levels of depression.

Instruments

Following measures were used to study variable of the study.

Demographic Sheet. Demographic information of the participants were obtained by using demographic sheet. The sheet contains questions about age, age of onset of menarche, education, socio-economic status, and certain questions (see Appendix A). Other measures used are as follow:

Menstrual-Symptoms Questionnaire. For measuring menstrual symptoms Menstrual Symptom Questionnaire was used (Chesney & Tasto, 1975). MSQ is a self-report measure consisting of 24 items that is used to assess menstrual symptoms and related pains. It has two subscales, spasmodic and congestive. Spasmodic subscale contain 12 items and comprised of physical symptoms related to menstrual cycle. While Congestive subscale also contains 12 items but it is different from spasmodic in that it contains psychological symptoms of the menstrual cycle. Reliability reported for MSQ was.76.

The score ranges are from 1 to 5, 1= never and 5=always. The higher score on MSQ will predict more symptoms while lower score on MSQ predict lesser symptoms.

Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D (Radloff, 1977) consist of 20 items is used for the assessment of depressive symptoms. During the course of past week how frequently each item is applied to them respondents have to rate accordingly. Response options range from 0 to 3.

0=rarely or none of the time to 3=most or all of the time. The established reliability for CES-D was reported as .94.

Ruminative Response Scale. It was developed by Nolen-Hoeksema and Marrow (1991). Ruminative Response Scale was used to assess rumination. The scale has 4 point response options where 1= almost never, 2= sometimes, 3= often, and 4= almost always. The RRS consist of 16 items. On each item respondent have to indicate how often they engage in each of these 16 ruminative thoughts or behaviors when they feel depressed, low, blue.

Composite score on the tendency to ruminate were taken by summing each of the items. The established reliability of the RRS was reported .82 (Nolen-Hoeksema & Marrow, 1991). Higher scores on the scale indicate higher levels of rumination. Some earlier studies has used Rumination response scale indigenously and adequate reliability .73 for the construct was revealed by them

Self-Compassion Scale. Short form self-compassion scale is a shorter version consisting of 12 items. This is the shorter version of the 26 items larger version to measure self-compassion. Items ranges are on a 5 point-likert scale (1=almost never - 5almost always).

Negatively worded items are score through reverse coding and then average score are computed on the scale by adding score for each item and by dividing it by number of item i-e 12 Scores are obtain on each subscale and computed later. Good internal consistency reliability (r =.80) has demonstrated by self-compassion scale reported by the past studies as well as has been reported to have well established test-retest reliability (r =.93) over the period of three weeks (Neff, 2003). Research work focusing on the theory of self-compassion uses self-compassion scale as a measurement instrument.

Research Design

The aim to study was to explore the relationship between menstrual symptoms, rumination, self-compassion, and premenstrual depressive symptoms among menstruating females. For this, Menstrual Symptom Questionnaire

(Chesney & Tasto, 1975), Rumination Response Scale (Nohlen-Hoeksema, 1991), Self-Compassion (Neff, 2003), and Center for Epidemiologic Studies Depression Scale (Radloff, 1977), were used. Research design comprised of only one phase which is main study in order to test the hypotheses.

Sample

Using the technique of convenience sampling 300 adolescent and adult women was approached from different universities of Islamabad and Rawalpindi. Adolescent and adult from different socio-economic -status and different educational level were included. The inclusion criteria were that the females experiencing menstrual cycle and are able to understand and read English language. Exclusion criteria was that the females must not have any other physical and psychological health problem except asthma or allergy.

Table 1

Sample Demographics for Study (N= 250)

Variables	*f*	%	Variables	*f*	%
Age			**Socio-economic status**		
14-20	105	42.0	Lower	15	6.0
21-27	143	57.2	Middle	192	76.8
Education			Upper	19	7.6
Below graduation	99	39.6	**Other health problems**		
Above graduation	151	60.4	Yes	35	14.0
Age of menarche			No	205	82.0
10-14	139	55.6			
15-17	101	40.4			

In table 1 demographic variables and frequencies along with their percentages have been summarized .42% of sample comprised of age 14-20 where 57.2% comprised of ages 21-27. 39.6% of sample comprised of education level below graduation and 60.4% of sample comprised of education level above graduation. The percentage of age of menarche is 55.6 between10-14 and 40.4% are between15-17. 6% sample reported lower, 76% middle and 7.6% upper socio-economic status. 14% sample comprised of individuals with other health problems and 82% with no other health problem. Nuclear system was reported 84.8% and 12% reported joint family system.

Procedure

Participants of the study were approached from the different universities and colleges of Rawalpindi and Islamabad. For the purpose of data collection, participants were informed about the research purpose and for participation in research study consent was acquired from them after providing them verbal instructions. Participants were asked to fill demographic sheet along with scales measuring study variables. Participants were assured that the data provided of them would remain confidential. On average, participants took 15-20 minutes for filling questionnaires 300 questionnaires were distributed and around 280 were received. At the end participant were thanked for their cooperation for research.

RESULTS

Chapter 3

Results

The current study was aimed to explore the relationship between menstrual symptoms, rumination, self-compassion and depressive symptoms in females and the role of demographic variables in these variables. First of all, Cronbach's α- coefficient of scales and subscales were computed. Descriptive statistics were computed including mean, standard deviation, skewness etc. Pearson Product Moment Correlation was computed to investigate the relationship among variables. Linear Regression Analysis was run to find out the predicting role of menstrual symptoms, rumination, and self-compassion in depressive symptoms. Content analysis on the basis of questions asked in demographic sheet was also done in the form of frequencies and percentages. Moreover, *t*-test was performed to study the individual differences on study variables.

Psychometric Properties of Scales

To see the descriptive statistics and psychometric properties alpha reliability coefficients, mean, standard deviation, range, skewness and kurtosis of scales and their subscales are computed:

Table 2

Descriptive and Alpha Coefficient for all Study Variables (N = 250)

Measures					Range			
	Items	*α*	*M*	*SD*	Potential	Actual	Skewness	Kurtosis
Menstrual S	24	.87	62.1	5.33	24-120	24-101	-.06	-.63
Spasmodic	12	.81	33.4	8.66	12-60	12-54	-.05	-.31
Congestive	12	.69	30.6	8.88	12-60	12-53	.05	-.63
Self-Com	12	.86	35.2	15.55	12-60	22-48	-.02	-.39
Rumination	16	.87	38.1	8.67	16-64	16-64	-.17	.07
Depression	20	.71	23.1	8.61	0-60	1-51	.36	.09

Note. Menstrual S= Menstrual Symptoms, SPS= Spasmodic, CON= Congestive, Self-Com= Self-Compassion, RRS= Rumination Response, CES-D= Center for Epidemiologic Studies Depression Scale.

Table 2 illustrates Mean, Standard Deviation, Alpha Coefficient, Skewness, and Kurtosis of the study variables which includes menstrual symptoms, spasmodic-s, congestive-s, Self-compassion, Rumination, depression, spasmodic, and congestive. It shows significant reliabilities of menstrual symptoms, spasmodic-s, congestive-s, self-compassion, rumination and depression, which are .87, .81, .69, .86, .87 and, .71 respectively. It means all the scales have high internal consistency and thus are reliable. It also shows the mean and standard deviation of all the major study variables which are showing the distribution of data.

Correlation between Study Variables

Through bivariate correlation analysis the relationship, its intensity, and direction of relationship between study variables are computed which are presented in

Table 3

Correlation Matrix Between Study Variables (N = 250)

S.No	Variables	1	2	3	4	5	6	7	8	9
1	Menstrual Symptoms	-	.92**	.92**	-.13	.46**	.37**	.02	-.11	.03
2	Spasmodic		-	.69**	-.05	.41**	.35**	.03	.07	.03
3	Congestive			-	-.13*	.42**	.32**	.02	-.09	.04
4	Self-compassion				-	-.17**	-.24**	.16*	.06	.07
5	Rumination					-	.49**	-.26**	-.03	-.09
6	Depression						-	-.06	.03	-.09
7	Age							-	.10	.46**
8	Menarche Age								-	-.03
9	Education									-

Note. Menstrual symptoms, Spasmodic- Subscale, Congestive Subscale, Self-compassion, Depressive Symptoms, Age, Age of Menarche, Education.

*$p<.05$, **$p<.01$

Table 3 displays the correlation matrix for scales and subscales of menstrual symptom scale. Both of the subscales (spasmodic and congestive) have significant positive correlation ($p < .01$) with the total score, showing construct validity of both the scales. The table also depicts significant positive correlation ($p < .01$) between menstrual symptoms, rumination, and depressive symptoms and significant negative correlation with self-compassion. Correlation analysis of study variables with age is

also conducted. Age is significantly negatively ($p < .01$) with depressive symptoms. Correlation analysis of study variables with age of menarche is also conducted.

Multiple Linear Regression for Study Variables

Table 4

Multiple linear regression showing the effect of Menstrual symptoms, Rumination, and Self-Compassion on Premenstrual depressive symptoms (N = 250)

Predictors				95% *CI*	
	B	*SE*	*t*	*LL*	*UL*
Menstrual Symptoms	.07*	.04	.16	.02	.16
Rumination	.38**	.07	.38	.25	.51
Self-Compassion	-.17**	.60	.17	-.29	-.05
R^2	.28				
F	27.95				

**p < .05, **p < .01*

Table 4 illustrates the predictability of premenstrual depressive symptoms through menstrual symptoms, rumination, and self-compassion. Beta value indicates the direction of prediction. Positive beta value indicates that these variables predict outcome variable positively and negative value indicate that these variable predict outcome variable negatively. Table shows that beta values are significant, showing that menstrual symptoms and rumination is positive predictor of premenstrual depressive symptoms and self-compassion is the negative predictor of premenstrual depressive symptoms.

Group Differences on study Variables

Independent sample t-test were used to see the difference along different demographic of the study i.e., education (below graduation & above graduation), age of menarche (10-14 & 15-17), and age (14-20 & 21-27) (see Table 5, 6, 7).

Differences along Education. Independent sample *t*-test was used to study the difference along the level of education.

Table 5

t-test showing Mean, Standard Deviation, and t value for Education on Study Variables (N =250)

	Below Graduation (n=157)		Above Graduation (n = 153)				95% *CI*		
Variables	*M*	*SD*	*M*	*SD*	*T*	*P*	*LL*	*UL*	Cohen's *d*
MSS	63.30	15.59	64.37	16.47	-.51	.84	-5.23	3.09	
SPS	33.02	8.51	33.58	8.77	-.49	.62	-2.79	1.67	
CON	30.14	8.76	30.86	8.96	-.62	.54	-2.99	1.56	
SCS	36.10	36.10	37.26	9.01	-1.01	.29	-3.42	1.10	
RRS	39.14	7.27	37.49	9.48	1.45	.02	-.59	3.89	0.20
DEP	23.05	8.75	23.19	8.55	-.12	.46	-.59	2.10	

Note. MSS = Menstrual symptoms, SPS = Spasmodic-s, CON = Congestive-s, SCS = Self-Compassion, RUM = Rumination Response, DEP = Depression.
$*p < .05$, $**p < .01$

Table 5 depicts educational differences on study variables. Results indicate the significant mean differences on RRS, where below graduation students exhibit more ruminative tendency as compared to above graduation students. Results indicates that significant differences exist on rumination, while there are non-significant education differences on menstrual symptoms, self-compassion and premenstrual depressive symptoms.

Differences along Age of Menarche

Table 6 indicates age of menarche (onset of menstruation) differences on study variables. Findings indicates non-significant differences across groups for menstrual symptoms, spasmodic subscale, self-compassion, rumination and premenstrual depressive which are not consistent with literature. These non-significant results can be attributed to the much difference in sample size across groups.

Table 6

t-test showing Mean, Standard Deviation, and t value for Age of Menarche on Study Variables (N=250)

	10-14 (*n*= 135)		15-17 (*n*= 97)				95% *CI*		
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*	*LL*	*UL*	Cohen's *d*
MSS	65.43	16.59	61.69	15.41	1.74	.08	-.49	7.96	
SPS	34.31	8.65	31.95	8.74	2.06	.04	.09	4.62	0.27
CON	31.05	9.48	29.91	8.06	.97	.33	-1.18	3.46	
SCS	36.48	9.24	37.09	8.17	-.53	.59	-.29	1.68	
RRS	38.52	8.24	37.08	9.04	1.26	.20	-.81	3.69	
DEP	23.68	8.99	22.18	8.32	1.29	.19	-.79	3.80	

Note. MSS = Menstrual Symptoms, SPS = Spasmodic-S, CON = Congestive-S, SCS = Self-compassion, RRS = Rumination Response, DEP = Depression.
$*p < .05$, $**p < .01$

Differences along Age

Table 7

t-test showing Mean, Standard Deviation, and t value for Age on Study Variables (N=250)

	14-20 (*n* =105)		21-27 (*n* =134)				95% *CI*		
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*	*LL*	*UL*	Cohen's *d*
MSS	64.19	15.00	63.95	16.74	.12	.91	-3.87	4.35	
SPS	33.70	8.00	33.19	9.04	.46	.65	-1.69	2.70	
CON	30.50	8.71	30.70	9.01	-.18	.86	-2.47	2.06	
SCS	36.68	8.59	36.89	9.03	-.19	.85	-2.48	2.05	
RRS	40.13	7.88	36.66	8.99	3.09	.01	1.26	5.67	0.41
DEP	22.47	8.80	23.63	8.49	-.94	.35	-3.29	1.17	

Note. MSS = Menstrual Symptoms, SPS = Spasmodic-S, CON = Congestive-S, SCS = Self-compassion, RRS = Rumination Response, DEP = Depression.
$*p < .05$, $**p < .01$

Table 7 indicates age differences on study variables. Findings indicate that there are significant age differences on rumination. Results indicate that females with age 14-20 ruminate more as compared to the females with age 21-27. While the non-significant results for menstrual symptoms, spasmodic subscale, congestive subscale,

rumination, self-compassion and premenstrual depressive symptoms can be explained through many reasons because of inconsistency in literature.

DISCUSSION

Chapter 4

Discussion

The present study aimed to explore the relationship between menstrual symptoms, rumination, self- compassion and depressive symptoms among menstruating females. Furthermore, it also aimed at exploring the relationship of various demographic variables i.e., education, age, and age of menarche with study variables. For measuring our study variables i.e., menstrual symptoms, rumination, self-compassion, and depressive symptoms the instruments used were Menstrual Symptom Questionnaire (Chesney & Tasto, 1975), Rumination Response Scale (Nohlen-Hoeksema, 1991), Self-Compassion Scale Short Form (Neff, 2003), Center For Epidemiologic Studies Depression Scale (Radloff, 1977). In order to meet these objectives, data was collected from university females (*N*=250) by using convenient sampling technique from the colleges and universities of Rawalpindi and Islamabad.

The number of potential relationships is considered between study variables. First, hypothesis is menstrual symptoms, and rumination are positively associated with depressive symptoms and self-compassion is negatively associated with depressive symptoms. Second, hypothesis is that menstrual symptoms, rumination, and self-compassion are predictors of depressive symptoms. Third, hypothesis is that there is positive association between physical and psychological symptoms of the menstrual cycle. Fourth, Females with higher education, age and with early menarche will be higher in score on study variables as compared to females with lower education, age and later menarche.

Results for reliability analyses of Menstrual Symptom Questionnaire, Center for Epidemiologic Studies Depression Scale, Ruminative Response Scale, And the Self-Compassion Scale Short Form (see Table 2) has shown these measures as highly reliable measures to be used with the sample of present study, hence, ensuring one aspect of psychometric properties. Many Studies assessed attitudes related to menstruation (Hoerster, & Katherine, 2003; Water Aid, 2009; Rempel & Baumgartner, 2003), rumination (Treynor et al., 2003; Morrow & Nolen-Hoeksema, 1991), and self-compassion (Leary, Tate, Adams, Batts Allen, & Hancock, 2007),and depressive symptoms (Mumford et al., 2015) by using these measures. By this the

edge was given for getting information from the large participants by using these reliably valid measures. The stability, validity and reliability of these scales has been supported in the previous studies Therefore, the present author has also chosen these quantitative measure for this study.

First, hypothesis is that menstrual symptoms are positively associated with rumination and depressive symptoms and negatively associated with self-compassion. Research findings as per interpretation depicted by items demonstrate that menstrual symptoms are positively significantly correlated with the depressive symptoms. As literature review has shown menstrual symptoms are associated with the depressive symptoms by ensuring the construct validities for both measures. According to Negriff, Dorn, and Huang (2009) the menstrual symptoms are correlated significantly with depressive and anxiety symptoms that indicates the validity evidence for these scales. For females the risk for experiencing depressive symptoms is higher during puberty, which is the period of increased sex hormones variations (Sloan, & Schechter, 2008). Luteal phase has been shown as a greater risk for depressive symptoms, other negative moods or depression (Prior & Hitchcock, 2009).

The role of puberty has been considered by much latest work that emphasized the effects of early puberty on adolescence for negative behavioral outcomes, as opposed to late timing (Caspi & Moffit, 1991). Internalizing disorders specially depression were looked greater risk by majority of this work (Joinson et al., 2011). According to Jennifer et al. (2016), depression have been implicated as a significant risk factor to consider when assessing how females experience menstrual symptoms in much recent researches which investigated behavioral and psychological risk factors for menstrual symptoms in premenopausal and young adult. In present context too it means, girls who experience more menstrual symptoms are more related to the depressive symptoms and conversely. Correlation of total score on MSQ with total score on CES-D revealed such a relationship that suggested the positive significant relationship between the participant menstrual symptoms, and depressive symptoms.

As in hypothesis menstrual symptoms are also positively associated with rumination. Research findings as per interpretation depicted by items demonstrate a significant positive relationship between menstrual symptoms, rumination, and depressive symptoms (see Table 2). The construct validities were ensured for measures as found in literature review that a set of maladaptive cognitive and behavioral reactions to negative emotions are defined broadly as maladaptive

responses to emotion that predict a worsening of that negative feelings. Examples included were labeling, difficulties with awareness, labeling, regulation of affection; excessive self-concern in response to feelings and rumination, and also maladaptive behaviors or uncontrollable in response to feelings. Difficulties with emotional regulation and higher tendencies or trait towards rumination were expected to serve in females with menstrual related mood disorders to further intensify the intensity of premenstrual emotional symptoms. Prior and Harvey (2009) have shown that depressive symptoms, other negative moods and depression, are greater in the luteal phase.

A degree of premenstrual impairment by the cyclical repetition of emotional symptoms is similar to that experienced in panic disorder, major depression and posttraumatic stress disorder (Pearlstein, 2008). The influencing role played by changes in moods and emotions during this time develop negative attitude regarding this phenomenon. As supported by the literature the fact that because of low mood states in puberty and the bodily changes accompanied with mood swings girls form negative attitudes. Both emotional and menstrual cycle related symptoms tend to increase during adolescence

It was suggested that higher negative feelings in the luteal phase are related to the mood disorders. It is also suggested that sex hormones influence emotional states and thoughts. It means that in present context too, girls who experience more menstrual symptoms relate more to rumination and depressive symptoms and vice versa. This relationship was revealed by correlation of MSQ (see Table 3) with total score on RRS (see Table 3), and CES-D (see table 3) suggests the significant positive correlation between the menstrual symptoms, rumination and depressive symptoms of the sample.

Second hypothesis is that menstrual symptoms, rumination and self-compassions are predictors of depressive symptoms. As per interpretation research findings from regression analysis demonstrate that self-compassion is significant negative predictor of depressive symptoms while menstrual symptoms and rumination are significant positive predictors of depressive symptoms. According to Neff, individuals with self-compassion levels higher are used to less engage in self-rumination than self-esteem, and are also used to less engage in self-focus or self-centered processes and are also considered as strong predictors of lower levels of public self-centeredness. It was proposed in the past study that, as compared to the

female adolescents, male adolescents are high in self-compassion and low in psychopathology.

Overall, attitude of the girls or females is negative towards menstruation in Pakistan as it was concluded from the previous findings. There is a lack of awareness regarding sex related problems faced by girls due to being taboo so this could be the reason for the negative attitudes of the girls towards this phenomenon. As previous researches reported that most of the mother in Pakistan are not educated and trained so information through mother is transferred to their daughters which can be false and harmful as mother told them their experiences which could different from their experiences. This false perception regarding suffering can be more problematic for girls. A more health promoting behavior and less psychopathological symptoms were related to the self-compassion in patients of cancer. Similarly, as proposed by Neff, that people with high self-compassion were expected less to be preoccupied with inadequacy and emotions and were also less expected to ruminate about past sufferings and pains.

Generally in the life of adolescents puberty comes with many difficulties and particularly in the life of adolescent females therefore, it is considered that she needs more support than earlier and also better techniques are their requirements to better cope with such difficulties brought up by puberty and other life experiences. Repeatedly suggested stress buffer by previous researches is self-compassion, to foster self-compassion adding interventions should be plan and treatment should also be planned for example CBT these interventions and treatment plan can help in reducing the depressive symptoms relapses and also number of depressive symptoms after such successful psychotherapies.

Many types of interventions may contribute to the treatment of depressive therapies. The components of self-compassion looking differential variations in the self-compassion components in reaction to many types of interventions may be contributing to the depressive therapy treatment. Lack of self-compassion can be contributed or indicated to the more general vulnerability to depression or psychopathology. The development of self-compassion can help wider range of individuals to overcome their sufferings and difficulties. People currently suffering from depression were indicating lack of self-compassion which is considered as the protective factor against psychopathology was proposed by earlier studies. Therefore

interventions and treatment plans including self-compassion can profit from such practice.

Self-compassion has been associated with positive psychological health outcomes. Being compassionate towards self includes decreased levels of depressive symptoms, reduced anxiety of evaluation about self, decreased in negative emotions, higher satisfaction about life, and less ruminative tendency (Neff, 2003). For the improvement in well beings and for people in condition within therapy and, mood swings a significant tool suggested was self-compassion Lowered mental stress (including decreased depressive symptoms, lowered anxiety levels and increased subjective well-being).

Third hypothesis of the study states that physical symptoms of the menstrual cycle are positively correlated with psychological symptoms of the menstrual cycle. Results for this hypothesis can be explained through the correlational analysis for both subscales spasmodic (includes physical symptoms), and congestive (includes psychological symptoms) of MSQ. Research findings as per interpretation depicted by items demonstrate a significant positive correlation between spasmodic subscale and congestive subscale, which indicates that there is a significant positive relationship between physical and psychological symptoms of the menstrual cycle, thus confirming the hypothesis.

Persistent with early research the findings of the present study confirm that, during adolescence, during menstruation psychological symptoms are significantly linked with physical symptoms during menstruation. It has been suggested by the findings of the study that psychological symptoms of the menstrual cycle can be influenced directly or both by the physical symptoms of the menstrual cycle as proposed by the physical distress hypothesis and can be influenced during menstruation indirectly by the disengagement from regular activities.

These results suggest that if to deal with the psychological symptoms effectively physical symptoms of menstrual cycle can also improve or vice versa. As Literature suggested that managing and recognizing several symptoms associated with the menstrual cycle must be considered for better prevention efforts by further evidences with the research. Both physical and psychological symptoms of the menstrual cycle have been suggested to be effected positively by selective serotonin reuptake inhibitors (SSRIs).

One of the objectives of the study was to explore the differences in menstrual symptoms, depressive symptoms, rumination and self- compassion among girls on the basis of their education, age and age of menarche. Results only indicated the significant positive correlation for education, age and age of menarche for rumination hence, not confirming hypothesis of the research for all study variables. It was observed that there was much difference in sample size of the two groups. Therefore, non-significant result for all variables can be attributed to the difference in sample size of two groups. Unless women are not educated about menstruation they will keep believing myths regarding this phenomenon which will reduce the flexibility and activities during. At present time, only sanitary napkin manufacturers are the source of information regarding menstruation after mothers, friends. There is a great requirement of education imparted at schools and college level due to the lack of proper institutional education regarding this phenomenon. Information regarding menstruation is acquired only from mother most probably as they are not always right because they are also not trained about this phenomenon. They also avoid talking about menstrual periods and usually shared information gained through their experiences. So there is a great need for research regarding such a sensitive and inevitable phenomenon including mothers and daughters together.

Conclusion

The study was conducted to explore the role of menstrual symptoms, rumination, and self-compassion in the development of premenstrual depressive symptoms among females. It was observed that menstrual symptoms and rumination are significant positive predictors of premenstrual depressive symptoms and self-compassion is a negative predictor of premenstrual depressive symptoms. Moreover it was indicated that females with higher levels of education, age, and later menarche were showing lesser ruminative tendency towards menstrual symptoms or depressive symptoms as compared to females with lower levels of education, age and early menarche.

Limitations

The cross sectional design of this study does not allow for causation to be inferred but indicates that further investigation in this area would contribute to the development of better strategies for adolescent related to the menstrual difficulties.

Sample for the present research consist of only educated females. It was considered highly biased sample to the limited time and resources at the disposal of the research. The sample taken for the purpose of the study was very small in size therefore the findings cannot be generalized to the whole population. One cannot conclude from the results of the research that it was the perception of the total population.

Because of concern on student population, an important variable of socio-economic status was ignored. Because of less variations in this variable among students was ignored. As the sample was homogenous in nature and for the variations in sample responses, like on the basis of comparison between education levels, age and age of menarche therefore, we can say non-significant were found.

Implications

The findings have implications for treatment approaches for women with menstrual cycle-related difficulties and for women vulnerable to brooding rumination, depressive symptoms and lack of self-compassion. These findings imply the need for education to help women manage their menstrual symptoms and increased awareness of the benefit of treating menstrual symptomology.

As the chief source of reproductive health information was from the mothers, increasing the involvement of mother in their daughter's reproductive education and menstrual cycle related problems is considered important.

As mothers are the primary source of knowledge about menstruation, it is vitally important to make sure that they have the correct information and guidance in how to discuss this topic with their daughters. If the negative attitude toward menstruation pursues to be passed down to next generations of women, it will sustain a sense of shame for the body, and therefore the self, among girls.

Better facilities to manage the crisis like using ready-made sanitary napkins also facilitate positive experiences and attitudes. As suggested incorporating an educational program on menstrual cycle-related issues into the regular school curriculum for adolescent girls would seem appropriate

Various interventions including self-compassion exercises and cognitive restructuring may contribute to the refinement of depressive symptoms and menstrual symptoms. However, findings suspect that a lack of self-compassion represents a

more general vulnerability factor for psychopathology, and that a broader range of individuals may profit from developing more self-compassion oriented intervention and treatments. Self-compassion and coping concluded that a self-compassionate attitude promotes a way of coping with negative events that is primarily characterized by functional non-avoiding coping styles, such as positive cognitive reframing or problem solving.

Suggestions

Every research opens the avenues for further research. Therefore, following suggestions are made for advance exploration in this sensitive area. More qualitative research should be carried out to have phenomenological inspection of phenomenon. Mothers along the daughters can be included in the sample to study the compatibility in their experience and attitude. In present study, only female adolescents who already had experienced menarche were concerned; in future age ranges can be extended to preadolescent and adult females in the sample. Presently, sample is too small, nationwide study or large sample can be taken up to improve external validity of the findings.

In Present study scales were used in English language. Only those participants were part of the study that could read and write in English language. Those who were not well familiar with English language could not participate in this study. Therefore, to confirm much consistency in responses and validity of scales, scales could be translated in Urdu in future researches. This will aid in collecting data from the much larger population in Pakistan of those who don't have comprehension of English language. The causal relationship should be clarified in future researches by using a longitudinal and an experimental design. Further, this study depends solely on the use of self-report measures, which might be influenced by response biases due to, for example, social desirability or demand characteristics.

Present research was the ground work towards suggesting effective intervention or treatment plans for menstrual related difficulties that must take into account individual differences and self-compassion exercises. Future research should look for identifying particular individuals with menstrual difficulties and to see the effectiveness of such exercises in them. It is suggested that the sample should be selected randomly in order to have precautions against all kinds of biases and homogeneity in nature of sample. In spite of all this, it can be assumed that the present

study has opened new avenues for all the researchers who are interested in the perception of such sensitive issues.

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APPENDICES

Annexure A

Informed Consent

I Rabia Shafique, MSc research student at National Institute of Psychology, Quaid-i-Azam University Islamabad conducting a research as per requirement of degree. NIP conduct researches on different psychosocial issues so this research is also psychosocial in nature. In order to participate in this research study, it is necessary that you give your informed consent. I request you for support by participating in this research. I assure you that information provided will be kept confidential and will only be used for research. You have full right to quit at any stage.

Your help, support and participation will be highly appreciated. Participation in this research is completely based on your willingness to participate. If you agree to participate then please sign below.

Thank you!

Signature _____________

Rabia Shafique
Rabiashafique77@gmail.com

Annexure B

Demographic Sheet

Age in years _______________

Education in years ________________

Age of menarche (When period started) _________________

Socioeconomic status: _________Upper ______ Middle _________ Lower

Family system: _______joint _______Nuclear

Do you have any other health problem _________Yes ___________No

Annexure C

Menstrual Symptom Questionnaire

Read the following statements and answer the following as per you experience "menstruation".

Sr. No	Statements	Never	Rarely	sometimes	Often	Always
1	I feel irritable, easily agitated, and am impatient a few days before my period.					
2	I have cramps that begin on the first day of my period.					
3	I feel depressed for several days before period					
4	I have abdominal pain or discomfort which begins one day before my period.					
5	For several days before my period I feel exhausted, lethargic or tired.					
6	I only know that my period is coming by looking at the calendar.					
7	I take a prescription drug for the pain during my period.					
8	I feel weak and dizzy during my period.					
9	I feel tense and nervous before my period.					
10	I have diarrhea during my period.					
11	I have backaches several days before my period.					
12	I take aspirin for the pain during my period.					
13	My breasts feel tender and sore a few days before my period.					
14	My lower back, abdomen, and the inner sides of my thighs begin to hurt or be tender on the first day of my period.					
15	During the first day or so of my period, I feel like curling up in bed, using a hot water bottle abdomen, or taking a hot bath.					
16	I gain weight before my period.					
17	I am constipated during my period.					
18	Beginning on the first day of my period, I have pains which may diminish or disappear for several minutes and then reappear.					
19	The pain I have with my period is not intense, but a continuous dull aching.					

20	I have abdominal discomfort for more than one day before my period.					
21	I have backaches which begin the same day as my period.					
22	My abdominal area feels bloated for a few days before my period.					
23	I feel nauseous during the first day or so of my period.					
24	I have headaches for a few days before my period.					

Annexure D

Center for Epidemiologic Studies Depression Scale

Sr. No.	Statements	Rarely or non of the time (Less than 1 (day)	Some or little of the time (1-2 days)	Occasionally or moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1	I was bothered by things that usually don't bother me				
2	I did not feel like eating; my appetite was poor.				
3	I felt that I could not shake off the blues even with help from my family or friends.				
4	I felt that I was just as good as other people.				
5	I had trouble keeping my mind on what I was doing.				
6	I felt depressed.				
7	I felt that everything I did was an effort.				
8	I felt hopeful about the future.				
9	I thought my life had been a failure.				
10	I felt fearful.				
11	My sleep was restless.				
12	I was happy.				
13	I talked less than usual.				
14	I felt lonely.				
15	People were unfriendly.				
16	I enjoyed life.				
17	I had crying spells.				
18	I felt sad.				
19	I felt that people disliked me.				
20	I could not get "going"				

Annexure E

Rumination Response Scale

For each of the following statement rate your level of agreement during menstruation using following scale.

Sr. No.	Statements	Almost Never	Sometimes	Often	Almo Alwa
1	Think about how alone you feel.				
2	How often you think, "I won't be able to do my job if I don't back up of this".				
3	Think about your feelings of fatigue and achiness.				
4	How many times you experience, it is hard to concentrate.				
5	How often you analyze, what am I doing is deserve able for myself.				
6	Think about how passive and unmotivated you feel.				
7	How many times you think about, "why can't I get going?"				
8	Think about how you don't seem to feel anything anymore.				
9	Think "why do I always react this way?"				
10	Think "I won't be able to concentrate if I keep feeling this way".				
11	How often you experience how sad I feel.				
12	How any times you think about all your shortcomings, failings, faults, mistakes				
13	Think about how you don't feel up to doing anything.				
14	Like to go someplace alone to think about your feelings				
15	Think about how angry you are with yourself				
16	Analyzing recent events to try to understand why I am depressed.				